

**CLAIM AMENDMENTS:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:

inquiring, from a remote location, a status of an upper-layer communication indicator indicating a point-to-point protocol (PPP) over Ethernet (PPPoE) layer 4 or above communication status, the upper-layer communication indicator displayed at a modem, wherein the status is observable by a visual inspection of the upper-layer communication indicator by an end-user;

entering the status into data storage;

performing a first set of actions when the status indicates that a PPP session has been established valid upper layer communication, the first set of actions including troubleshooting actions; and

performing a second set of actions when the status indicates that a PPP session has not been established invalid upper layer communication, the second set of actions including corrective actions.

2. (Previously Presented) The method, as recited in claim 1, wherein the inquiring comprises:

a service technician from the remote location requesting the end-user to provide the status of a light emitting diode (LED) on a Digital Subscriber Loop (DSL) modem.

3.-5. (Cancelled).

6. (Previously Presented) The method of claim 1, wherein performing the second set of actions comprises a service technician advising the end-user to perform a corrective action to a local configuration.

7. (Previously Presented) The method of claim 1, wherein performing the second set of actions comprises a service technician performing a corrective action at the remote location.

8. (Previously Presented) The method of claim 1, wherein performing the first set of actions comprises sending a service technician to a location of the end-user to perform a set of troubleshooting actions.

9. (Currently Amended) A transceiver positioned at a local location, the transceiver comprising:  
a connection port configured to communicate data signals from a computer positioned at the local location to a remotely located service provider device; and  
a first status indicator configured for visual inspection by an end-user to communicate a point-to-point protocol (PPP) over Ethernet (PPPoE) layer 4 or above communication status between the computer and the service provider device,  
wherein the first status indicator is configured to trigger a first set of actions including troubleshooting actions by indicating that a PPP session has been established valid upper layer communication and to trigger a second set of actions including corrective actions by indicating that a PPP session has not been established invalid upper layer communication.

10. (Cancelled).

11. (Previously Presented) The transceiver of claim 9, wherein the service provider device is a Digital Subscriber Loop Access Multiplexer (DSLAM).

12. (Previously Presented) The transceiver of claim 9, further comprising:  
a second status indicator configured to visually indicate an OSI layer 2 connection status between the computer and the remotely located service provider device.

13. (Previously Presented) The transceiver of claim 12, wherein the second status indicator is a wide area network status indicator.

14. (Previously Presented) The transceiver of, further comprising a second status indicator configured to visually indicate an OSI layer 1 status of the transceiver.

15. (Previously Presented) The transceiver of claim 14, wherein the second status indicator is a power status indicator.

16. (Currently Amended) A method of digital subscriber line service maintenance, the method comprising:

detecting a digital subscriber line (DSL) related troubleshooting event at a remote service terminal that supports an end-user computer having a DSL connection at a local site;

inquiring, from the remote service terminal, a status of a visual upper-layer communication indicator, the visual upper-layer communication indicator displayed at a customer premise equipment (CPE) device and associated with a digital subscriber line (DSL) terminating at the DSL connection of the end-user computer at the local site; wherein the status is observable by a visual inspection of the visual upper-layer communication indicator by an end-user, and wherein the visual upper-layer communication indicator indicates a point-to-point protocol (PPP) over Ethernet (PPPoE) layer 4 or above communication status;

entering the status of the visual upper-layer communication indicator into data storage coupled to the remote service terminal in connection with the DSL related troubleshooting event;

performing a first set of maintenance actions when the status indicates that a PPP session has been established valid upper layer communication, the first set of maintenance actions including troubleshooting actions; and

performing a second set of maintenance actions when the status indicates that a PPP session has not been established invalid upper layer communication, the second set of maintenance actions including corrective actions.

17-25. (Cancelled).